Serial No.: 10/025,137

Filed: December 19, 2001

Page : 2 of 7

## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## **Listing of Claims:**

1. (Currently amended) A set of nucleic acids comprising:

a first nucleic acid containing SEQ ID NO:1 or 3, and

a second nucleic acid containing SEQ ID NO:2 or 4,

wherein the first and second nucleic acids are no shorter than 18 nucleotides and no longer than 40 nucleotides in length and, participate in a polymerase chain reaction, with an Escherichia coli nucleic acid as a template, to generate a nucleic acid that specifically hybridizes under highly stringent conditions to SEQ ID NO: 5, 6, 7, or 8, or the complement thereof.

- 2. (Cancelled).
- 3. (Cancelled).
- 4. (Currently amended) The set of nucleic acids of claim [[3]] 1, wherein the first nucleic acid is SEQ ID NO:1 and the second nucleic acid is SEQ ID NO:2.
  - 5. (Cancelled).
  - 6. (Cancelled).
- 7. (Currently amended) The set of nucleic acids of claim [[6]] 1, wherein the first nucleic acid is SEQ ID NO:3 and the second nucleic acid is SEQ ID NO:4.
  - 8-14. (Cancelled).

Serial No.: 10/025,137

Filed: December 19, 2001

Page : 3 of 7

15. (Previously presented) A nucleic acid selected from the group consisting of SEQ ID NOs:5-8 and the complete complements thereto.

16-22. (Cancelled).

- 23. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:5.
- 24. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:6.
- 25. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:7.
- 26. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:8.
- 27. (Withdrawn) A method of detecting Escherichia coli, comprising:
  providing a sample having a nucleic acid from an unknown microorganism;
  amplifying the nucleic acid with an upstream primer containing SEQ ID NO:1 or 3 and a
  downstream primer containing SEQ ID NO:2 or 4, each primer being 18-40 nucleotides in
  length; and

detecting an amplification product; whereby detection of the amplification product indicates the presence of Escherichia coli.

- 28. (Withdrawn) The method of claim 27, wherein the upstream primer contains SEQ ID NO:1 and the downstream primer contains SEQ ID NO:2.
- 29. (Withdrawn) The method of claim 28, wherein each primer is 18-30 nucleotides in length.

Serial No.: 10/025,137

Filed: December 19, 2001

Page : 4 of 7

30. (Withdrawn) The method of claim 29, wherein the detecting step includes hybridizing the amplification product to a nucleic acid probe that is 26-1000 nucleotides in length and contains a sequence selected from the group consisting of SEQ ID NOs:5-8, or a sequence complementary thereto.

- 31. (Withdrawn) The method of claim 30, wherein said nucleic acid probe is 26-50 nucleotides in length.
- 32. (Withdrawn) The method of claim 27, wherein the upstream primer contains SEQ ID NO:3 and the downstream primer contains SEQ ID NO:4.
- 33. (Withdrawn) The method of claim 32, wherein each primer is 24-32 nucleotides in length.
- 34. (Withdrawn) The method of claim 33, wherein the detecting step includes hybridizing the amplification product to a nucleic acid probe that is 26-1000 nucleotides in length and contains a sequence selected from the group consisting of SEQ ID NOs:5-8, or a sequence complementary thereto.
- 35. (Withdrawn) The method of claim 34, wherein said nucleic acid probe is 26-50 nucleotides in length.
- 36. (Currently amended) The set of nucleic acid of claim 1, further comprising a third nucleic acid that is no shorter than 26 nucleotides and no longer than 1000 nucleotides in length and contains a sequence selected from the group consisting of SEQ ID NOs:5-8, and sequences complementary thereto, wherein the third nucleic acid specifically hybridizes under highly stringent conditions to SEQ ID NO: 5, 6, 7, or 8, or the complete complement thereof selected from the group consisting of SEQ ID NOs: 5-8 and the complete complements thereto.

Serial No.: 10/025,137

Filed: December 19, 2001

Page : 5 of 7

40. (Currently amended)The <u>set</u> nucleic acid of claim [[39]] <u>36</u>, wherein the third nucleic acid is SEQ ID NO:5.

- 41. (Currently amended) The <u>set</u> nucleic acid of claim [[39]] <u>36</u>, wherein the third nucleic acid is SEQ ID NO:6.
- 42. (Currently amended) The <u>set</u> nucleic acid of claim [[39]] <u>36</u>, wherein the third nucleic acid is SEQ ID NO:7.
- 43. (Currently amended) The <u>set</u> nucleic acid of claim [[39]] <u>36</u>, wherein the third nucleic acid is SEQ ID NO:8.